



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/963,514

09/27/2001

Caroline Blaizot

Q66282

1250

23373

7590

03/14/2005

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

SINGH, DALZID E

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/963,514

Applicant(s)

BLAIZOT, CAROLINE

Examiner

Dalzid Singh

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5 is/are rejected.
- 7) ☒ Claim(s) 3,4,6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/27/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirby (US Patent No. 6,647,208).

Regarding claim 1, Kirby discloses hybrid electronic/optical switch for switching subnodes in a monoblock wavelength division multiplex optical switching network, which method includes the following steps:

(a) collecting information concerning how traffic is crossing the initial monoblock switching node (see col. 2, lines 26-46; Kirby discloses step of monitoring traffic flows);

(c) considering each subnode successively in an order corresponding to reducing switching constraints (see col. 2, lines 47-58; Kirby discloses method of optimizing traffic flows and therefore reducing switching constraints; the switch communicates between each other and peripheral nodes, see col. 2, lines 26-28); and

(d) for each subnode, selecting all or part of the traffic of an incoming and an outgoing that satisfy the switching constraints of the subnode concerned (see col. 2, lines 47-58; for example, a particular link may be reserved for heavy traffic).

Kirby differs from the claimed invention in that Kirby does not disclose defining granularity and switching function of the subnodes to be detected. However, as shown in the flowchart of Fig. 6, Kirby shows discovering of network topology. Since the system of Kirby comprises multiple levels of switching (such as optical and electrical; see Fig. 2A), it would have been obvious that the different levels of switching system are considered as granularity. Furthermore, the topology as shown in Fig. 6, defines switching function of the system and since the system comprised of multiple levels therefore, the topology also defines granularity function of the switch.

Regarding claim 2, as shown in Fig. 6, Kirby disclose that the information collected in step (a) is information contained in the initial switching matrix of the monoblock node whose subnodes are to be detected (it would have been obvious that initial switching of the switch is detected in order to compare and optimize switching of the system).

Art Unit: 2633

Regarding claim 5, Kirby differs from the claimed invention in that Kirby does not specifically disclose the following substeps:

(d1) marking all of the traffic of the incoming granularity as coming from the subnode concerned and all the traffic of the outgoing granularity as going to the subnode concerned;

(d2) marking the traffic that satisfies the switching constraints of the subnode concerned as belonging to that subnode; and

(d3) increasing the number of ports of the subnode concerned.

However, in col. 3, lines col. 7, lines 38-61, Kirby uses tags (markings) for monitoring traffic flows from source to destination and for controlling the switch. Therefore, it would have been obvious to an artisan of ordinary skill in the art to implement such method, as disclosed by applicant, to the system of Kirby. One of ordinary skill in the art would have been motivated to do this in order to balance traffic flow.

Allowable Subject Matter

4. Claims 3, 4 and 6-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shiragaki (US Patent No. 5,457,556) is cited to show optical cross-connect system with space and wavelength division switching stages for minimizing fault recovery procedures.

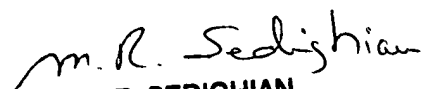
Lacey et al (US Patent No. 6,587,240) is cited to show optical switching node and method for operating same.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalzid Singh whose telephone number is (571) 272-3029. The examiner can normally be reached on Mon-Fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272--3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DS
March 3, 2005


M. R. SEDIGHIAN
PRIMARY EXAMINER